EPA Science Advisory Board Hydraulic Fracturing Research Advisory Panel Teleconference March 7, 2016

Comment by Yvonne Watson Save the Montebello Hills Task Force- Sierra Club/Angeles Chapter Fracking, Oil & Gas Committee -Sierra Club/Angeles Chapter

Thank you for this opportunity.

In California, the fundamental threat posed by hydraulic fracturing is that until recently state regulatory agencies did not monitor where or how often hydraulic fracturing was occurring. In 2012, Mr. John Marshall, the Chief Deputy Director of the Department of Conservation said,

"Fracking is considered a production stimulation practice...we are not required by law to be told of it."\*

In essence, fracking is regulated but not reported. If an activity is not reported, then how can the effects of that activity be known?

Dr. Tom Williams\*\*, a retired oil and gas expert, told me there is no direct information from operators/contractors regarding the monitoring of well stimulation from the environmental side and the process side so as to correlate cause and effects. If we don't know when, where, or how often fracking is occurring, then how can we possibly know what it's doing to our environment? Voluntary disclosure such as Frac Focus is not adequate and regulatory agencies have not yet caught up with the public's concerns.

In a 2013 presentation "Hydraulic Fracturing and Groundwater: A Los Angeles Water District Perspective," Mr. Ted Johnson, the Chief Hydrogeologist for the Water Replenishment District of Southern California included three definitions of "fracking":

**Conventional**: Done for 50+ years

**Unconventional:** Newer fracking in hard tight rock

**High-Rate Gravel Packing**: Small scale fracking near the well bore.

A troubling fact about High Rate Gravel Packing is that it's known by another name, "Frac Packing." Apparently this is a term that has fallen out of favor as illustrated by the July 13<sup>th</sup>, 2012, *Inglewood Oil Field Hydraulic Fracturing Report* prepared by Halliburton:

"The frac packs will be referred to as "high-rate gravel packs (HRGP)" in this report."

The report states frac packing involves "two distinct injection stages performed in a single step." A possible reason for avoiding the term "frac packing" can be found in a footnote citation: "Multistage Oil-Base Frac-Packing in the Thick Inglewood Field Vickers/Rindge Formation Lends New Life to an Old Producing Field, 2004." This reference states that in "2003, a radically different frac pack completion strategy was developed and evaluated" which enables "fracturing and gravel packing in one step."

According to Halliburton, "Most of the treatments performed in the [Inglewood Oil Field] are HRGP treatments." If HRGP (aka: frac packing) is being used on such a large scale in other fields, it should be included as part of the EPA's evaluation.

Thank you again for your consideration.

<sup>\*</sup> March 8, 2012 Community Advisory Panel Meeting, Kenneth Hahn Community Center, Los Angeles \*\*Dr. Tom Williams - Save the Montebello Hills Task Force- Sierra Club/Angeles Chapter